

## THE IMPACT OF THE IMPLEMENTATION OF ISO 9000 QUALITY MANAGEMENT SYSTEM ON THE CUSTOMER SATISFACTION EVALUATION PROCESS BY THE ROMANIAN SMES

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### Abstract

The paper highlights a part of the results of the research carried out at the level of Romanian Small and Medium Enterprises (SMEs) in the period 2007-2010.

One of the objectives of the research was to determine the way the Romanian SMEs use the results of evaluation and monitoring of customer satisfaction in the process of redesigning and improvement of the quality of products and services. These results were compared with those obtained in a study with the same purpose, conducted by the authors, in 2003-2004; it resulted a major progress in the process of evaluating and monitoring customer satisfaction by SMEs in Romania.

Furthermore, the research carried out showed that there is still significant reluctance in terms of using the results of this process, in connection with the concerns to ensure a sustainable performance for these companies.

**Keywords:** customer satisfaction, evaluation, monitoring, Small and Medium Enterprises, ISO 9000.

**JEL Classification:** L15, M13

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### Introduction

In the current economic context marked by the phenomenon of market internationalization, the companies are required to pay special attention to satisfying customer requirements and other stakeholders, to withstand on these markets, in terms of the strong increasing conditions of competition (Bruhn, 2006; Olaru and Dincă, 2008; Olaru and Herlemann, 2008). It is appreciated that gaining the customer's loyalty and winning new customers, is the major route through which the enterprise can create a value for its shareholders (Stoleriu and Olaru, 2007; Suditu, Olaru, Langă and Tuclea, 2009; Zineldin, 2006).

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According to this, we witness a more clear orientation of the models of quality management systems promoted by the international standards ISO 9000 to the re-organization processes in terms of satisfying customers' requirements, but also other stakeholders in order to ensure a sustainable business development (Evans, 2008; Olaru and Dincă, 2008; Olaru, Pitic and Dodre, 2009; Olaru et al., 2010a; Stoleriu, 2009). The specialised literature is extensively debating on the impact of implementation of the model defined by the ISO 9000 standards on business performance (Heras-Saizarbitoria, Casadesús and Marimón, 2011; Hongyi, 2000; Piskar, 2009; Suditu, Olaru, Langă and Tuclea, 2009), taking into account the specificities of SMEs (Bewoor and Pawar, 2010; Fotopoulos, Psomas and Vouzas, 2010; Stoleriu, Olaru and Purcărea, 2009).

In view of these standards, the organizations depend on their customers and therefore should understand their current and future needs, to satisfy these requirements, while preoccupied on overpass the customer's expectations. Moreover, it emphasized that "an organization's success is based on satisfying the needs and expectations of current and future customers and potential final users, as well as taking into consideration other stakeholders" (International Standards Office, 2008; International Standards Office, 2009). Also the mentioned standards provide guidance to achieve a sustainable success of the business in a complex, ever changing and demanding environment though a quality management based approach. Thus, according to ISO 9004:2009, the sustainable success of an organization can be achieved by developing its capacity to meet the needs and expectations of its customers and other stakeholders, in the long term and in a balanced way. An important role in this regard is the management of the organization, which should ensure the awareness of the organization environment, to stimulate learning and proper implementation of improvement measures in connection with those relating to the development and innovation capacity of the enterprise (International Standards Office, 2009).

In this respect, the evaluation and the monitoring of the customer satisfaction plays an important role, as this process allows the identification of customer requirements and determines the degree of compliance with these requirements.

The customer related performance is usually evaluated in connection with: the customer number evolution, the number of new clients, the market share development, the effect of losing the customers etc.; the customer satisfaction is a determinant to achieving objectives related to the financial performance of the company in general (Fuller and Matzler, 2008; Evans, 2008). Therefore the balance of satisfied customers, their opinions, the number of complaints, their nature and content, are important sources of information for the company, which can be used to identify new opportunities to improve products and services, respectively their system management. This is how business premises are provided to improve their performance.

Due to the increasing demands of the European business environment, SMEs in Romania recognize the need for deep changes in their performance in relation with the customers, as a source for continuous improvement of their competitiveness (Commission of The European Communities, 2008; Commission of The European Communities, 2010).

The update and adaptation of the policy priorities of Romania in the fields of SMEs, compared to the European Union level, is done by the "Government Strategy for the development of the SME sector by 2013", which was prepared according to the policies

promoted by the European Commission “Small Business Act for Europe” (Commission of The European Communities, 2008) and the Guidelines “Europe 2020 Strategy- a European strategy for smart, sustainable and Inclusive Growth” (Commission of The European Communities, 2010). Some key components of the policy include the increase of SMEs competitiveness, by developing a new culture for quality in Romania, mainly through developing the business support structure, as well as to increase the innovative spirit of the SMEs (Ministerul Economiei, Comerțului și Mediului de Afaceri, 200-).

Taking into consideration these aspects, the paper highlights some of the research results based on a questionnaire carried out between 2007 and 2010 to determine to what extent Romanian’s SMEs capitalize the results of evaluation and monitoring customer satisfaction in the process of redesigning and improving quality of products and services in relation to more substantial concerns of these companies on implementing a quality management system ISO 9000 (Olaru et al., 2010b; Paraschiv et. al., 2010; Stoleriu and Olaru, 2007). These results have been compared with those obtained in a study conducted by the authors for the same purpose during the period 2003-2004 (Olaru and Stoleriu, 2006).

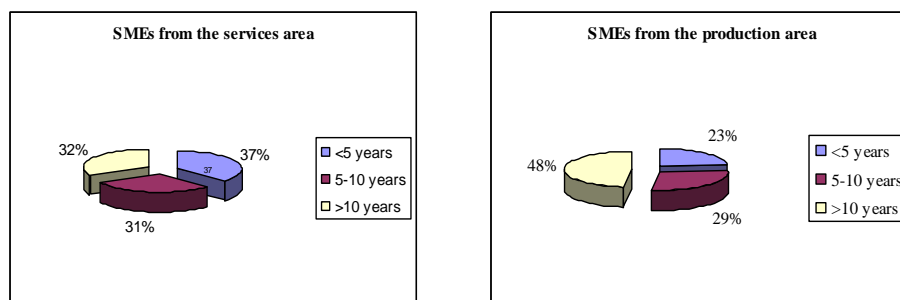
## 1. Research Methodology

In order to evaluate the interest of Romanian SMEs on the implementation of quality management systems and performance of these organizations in relation to the European model of quality management, a questionnaire based study was carried out, between 2007 and 2010 (Olaru et al., 2008; Olaru et al., 2010b). 3100 questionnaires were sent and 1227 filled in questionnaires were received, out of which 830 in the field of services (698 SMEs and 132 large enterprises). For the evaluation of answers a scale with five levels of appreciation was used, from „not at all” to „very much”/ „entirely” (if applicable), and for a part of the questions the answers had two options, affirmative or negative.

In this paper the results obtained after the processing of the question related of monitoring and evaluation the customer’s satisfaction by the surveyed SMEs are presented. On this purpose the questionnaire included the following question, with the options related to “*the measurement and monitory of customer’s satisfaction led to*” (multiple answers are allowed):

- *identifying customer’s requirements;*
- *redesigning the products based on the new requirements of customers;*
- *increasing customer’s satisfaction by improving product’s quality;*
- *establishing corrective/ preventive actions as a result of customer’s complaints;*
- *establishing and implementing a continuous improvement program.*

As shown in figure no. 1, about 63% of the surveyed SMEs, from the services area and 77% of those in the production field have more than five years of activity.



**Figure no. 1: The distribution of the surveyed SMEs during the study conducted in 2007-2010, according to their period of activity**

The results of the research were compared with those obtained from a similar research performed by the authors between 2003 and 2004, which enabled the formulation of conclusions on SMEs development in in this area. The respective study was conducted on a sample of 371 SMEs, of which 278 in production and 93 in services (Olaru and Stoleriu, 2006).

## 2. Research results

Taking into consideration the results of the research conducted in 2003-2004 and global changes, as well as the consequences of Romania's EU accession, within the research conducted during 2007 - 2010 we proposed to check the following hypotheses:

- The usage degree by the Romanian SMEs of the data obtained during the measurement and monitoring of customer's satisfaction has increased because of new requirements arising from the EU member state status and as a result of increased customer demands.
- The services field - a permanent evolving area - significantly increased the interest of the SMEs to assess and systematically monitor customer's satisfaction for a better use of the obtained results.
- Romanian SMEs give a greater importance to continuous improvement of the activities as part of the process of improving the overall performance of their quality management system.

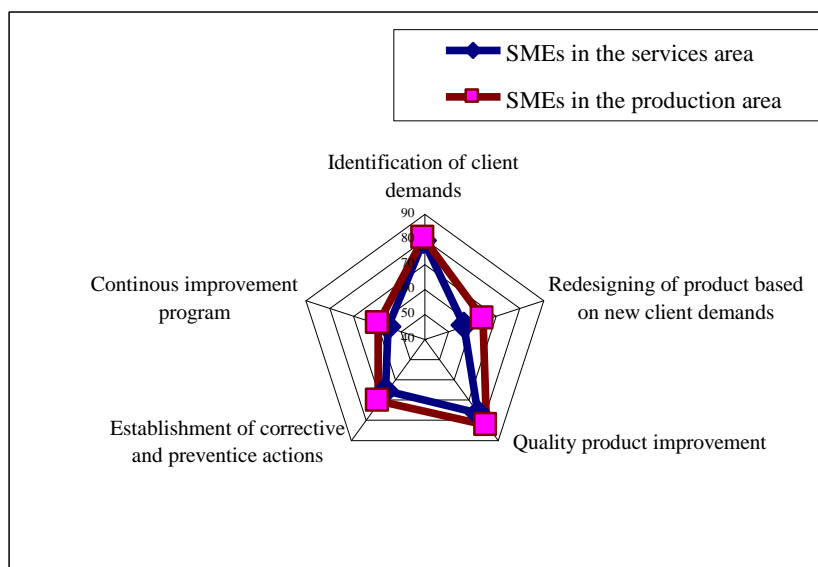
### 2.1 The use of the results for the evaluation and monitoring of customer's satisfaction in the process of redesigning the products and services

The research performed during the period 2007-2010 reveals the fact that 80% of the questioned SME's use „much” and „very much” the data resulted from the measurement and monitoring of the clients' satisfaction to identify their new requests, while according to the previous performed research, the share of those enterprises was 70% (figures no. 2 and no. 3) (Olaru et al., 2008; Olaru et al., 2010b).

Such a growth was expected given the fact that the competition became very strong, the technological development rhythm has accelerated, the clients' demands had risen and the consumers and environment protection requirements became more and more restrictive.

According to the same research, the obtained data in the process of evaluation and monitoring of clients' satisfaction is used „much” and „very much”, for the products and services' redesign, by 57% of the questioned SME's from the services area and by 65% of those in production area (figure no. 2).

Also, it can be noticed the fact that the SME's from services area had substantially increased the degree to which their results are further used regarding the evaluation and monitoring of clients' satisfaction, in comparison with the reference year of 2003, when, according to the research performed at that time, only 25% of the questioned SME's had declared the fact that they rely mostly on these results. Therefore, SME's from services area give a higher importance to the development of some new services and improvement of the existing ones, according to the more diversified clients' requests.



**Figure no. 2: The share of Romanian SMEs which were using „much” and „very much” the resulted data in the process of measurement and monitoring the clients' satisfaction (according to the performed research in the period 2007-2010)**

Increasing the usefulness of the results of the evaluation and monitoring of clients' satisfaction is, on the one hand, a result of the general evolution of SME's from Romania and on the other hand, it proves their capacity to adapt to more and more difficult market conditions.

## **2.2 Usage of the evaluation and monitoring results of the clients' satisfaction in the process of improvement of the offered products and services' quality and for the set of corrective and preventive actions**

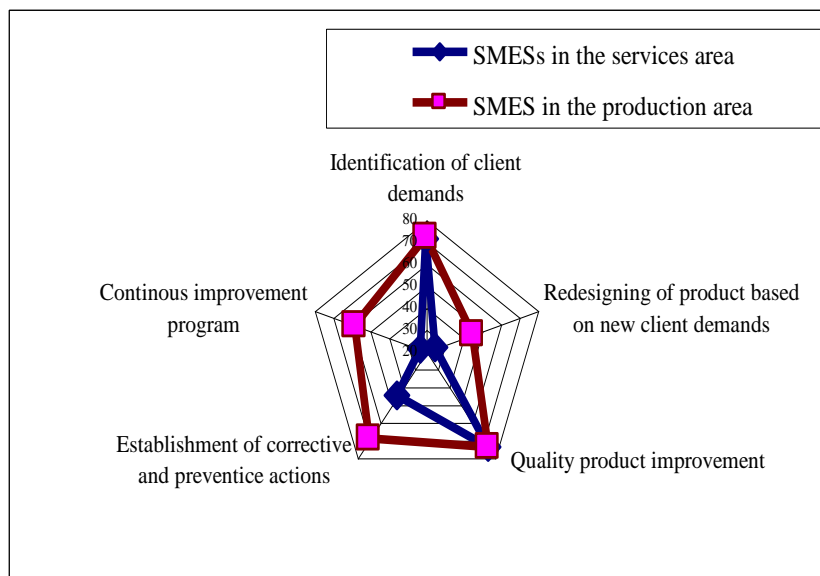
The clients' satisfaction level is highly influenced by the quality of the products and offered services. As it results from the figures no. 2 and no. 3, the interest of SME's for using the data provided by the clients in order to improve the quality of products and services, remained relative constant. Therefore, according to both researches, the majority of the questioned SME's (80%) are concerned with improving the quality of the provided products and services, taking into consideration the feedback from the clients.

A significant growth of the results usage degree regarding the evaluation and monitoring of clients' satisfaction it is observed in the process of the preventive and corrective actions set in the case of services area SME's. Thus, if in accordance with 2003-2004 research results, only 45% of those enterprises were using the respective data to set preventive and corrective actions, according to the performed research in the period 2007-2010, the share of those enterprises has grown at 66%.

An important factor that facilitated this evolution was represented by the growth of the SME's interest for implementing the ISO 9000 quality management system models. It should be noted the fact that year 2003 has been the transition year from the 1997 edition to the 2000 edition of the ISO 9001 standard, latter edition which has emphasized the importance of the satisfaction of clients' demands and the top management role in the implementation and continuous improvement of the quality management systems (Olaru et al., 2010a; Olaru et al., 2010b).

## **2.3 Usage of the results of the evaluation and monitoring of the clients' satisfaction for setting and implementing a continuous improvement program**

As a result of data processing obtained according to the performed research in the period 2007-2010, it resulted that: in the case of SME's from services area their interest for using the results of evaluation and monitoring of client's satisfaction for setting and implementing a continuous improvement program had grown substantially. Thus 55% from the questioned SME's from services area use those results for the set and implementation of some continuous improvement programs (figure no. 2), compared to the previously analysed period, when the share of those enterprises was only of 23% (figure no. 3).



**Figure no. 3: The shares of Romanian SMEs which were using „much” and „very much” the resulted data in the process of measurement and monitoring the clients’ satisfaction (according to the performed study in the period 2003-2004)**

Analysing the obtained results it can be said that all three hypotheses, which formed the basis of the performed research in the period 2007-2010, had been confirmed.

Thus, SME’s in Romania have improved the capacity of capitalisation the results of measurement and monitoring of clients’ satisfaction in the process of redesigning the products and services, being mostly preoccupied to set and implement continuous improvement programs, accordingly to the clients’ requests.

It is also confirmed the fact that SME’s from services area had substantially improved their services redesigning capacity and their quality improvement, using in a better way the results of evaluations and systemic monitoring of clients’ satisfaction.

The latter hypothesis on growing the interest for continuous improving of the organisation activities, as an integrating part of the process of the global improving process of the quality management systems, hasn’t been confirmed entirely. So, even if there has been a positive evolution in the case of SME’s from services it was expected that in the context of implementation of the procedural approach of the management system ISO 9000 the focus to be put on the use of some performance indicators better adapted to the requirements of this model.

## Conclusions

Taking into account the results of the research performed between the period 2007-2010, in comparison with those obtained within the research during 2003-2004, the SME’s noticed an obvious progress regarding the process of evaluation and monitoring of the clients’

satisfaction, the results of this process being mostly used for the redesign and improvement of the offered products and services' quality.

Also, in the context of implementation of the new quality management system models, the Romanian SMEs give a higher importance to defining some corrective and preventive actions, and respectively for the settlement and the implementation of some continuous improvement programs, according to the clients' requirements.

On the other hand, it can be noted that there still exist many possibilities regarding the use of some performance indicators better adapted to the procedural approach model of the quality management system, defined by the ISO 9000 international standards, regarding the results of the measurement and monitoring of the clients' satisfaction process. This continuous improvement process can ensure a sustainable performance in the case of SMEs, in the current complex and dynamic economic context.

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### **References**

- Bruhn, M., 2006. *Qualitätsmanagement für Dienstleistungen. Grundlagen. Konzepte. Methoden*. 6 Auflage. Berlin Heidelberg: Springer - Verlag.
- Bewoor, A.K. and Pawar, M.S., 2010. An empirical study of the motives and benefits of QMS/ISO implementation among Indian SMEs. *International Journal of Productivity and Quality Management (IJPQM)*, 6(3), pp. 379-406.
- Commission of The European Communities, 2008. "Think smart first" – A "Small Business Act" for Europe. [online] Available at: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0394:FIN:en:PDF>> [Accessed 25 May 2011].
- Commission of The European Communities, 2010. *Europe 2020 - The EU strategy for smart, sustainable and inclusive growth*. [online] Available at: <[http://ec.europa.eu/economy\\_finance/structural\\_reforms/europe\\_2020/index\\_en.htm](http://ec.europa.eu/economy_finance/structural_reforms/europe_2020/index_en.htm)> [Accessed 25 May 2011].
- Evans, J.E., 2008. *Quality & Performance Excellence. Management, Organization and Strategy*. 5<sup>th</sup> ed. South-Western U.K: CENGAGE Learning.
- Fotopoulos, C.V., Psomas, E.L. and Vouzas, F.L., 2010. Investigating total quality management practice's inter-relationships in ISO 9001:2000 certified organisations. *Total Quality Management & Business Excellence*, 21(5), pp. 503–551.
- Fuller, J. and Matzler, K., 2008. Customer delight and market segmentation: An application of the three-factor theory of customer satisfaction on life style groups. *International Journal of Tourism Management*, 29(10), pp. 116-226.
- Heras-Saizarbitoria, I., Casadesús, M. and Marimón, F., 2011. The impact of ISO 9001 standard and the EFQM model: The view of the assessors. *Total Quality Management & Business Excellence*, 22(2), pp. 197–218.



- Hongyi, S., 2000. Total quality management, ISO 9000 certification and performance improvement. *International Journal of Quality & Reliability Management*, 17(2), pp.168 – 179.
- International Standards Office, 2008. *ISO 9001 - Quality management systems. Requirements*. Geneva: ISO.
- International Standards Office, 2009. *ISO 9004 - Managing for the sustained success of an organization. A quality management approach*. Geneva: ISO.
- Ministerul Economiei, Comertului si Mediului de Afaceri, 200-. *Strategia Guvernamentala pentru dezvoltarea sectorului intreprinderilor mici si mijlocii*. [online] Available at: <[http://www.minind.ro/imm/StrIMM\\_Doc\\_23022011.pdf](http://www.minind.ro/imm/StrIMM_Doc_23022011.pdf)> [Accessed 29 January 2011].
- Olaru, M. and Stoleriu, G., 2006. Study on the Effects of Implementing a Surveillance and Evaluation System for Customer Satisfaction in the Case of Romanian Small and Medium Enterprises. In: IGWT, *The 15th Symposium IGWT „Global Safety of Commodity and Environment. Quality of Life”*. Kiev, Ukraine, 12-17 September 2006. Kiev: s.n.
- Olaru, M. and Dincă, V., 2008. Ensuring a fair competition for SMEs in the European Union. In: ASEBUSS, *First ASEBUSS International Conference on “Building & Sustaining Competitive Advantage in a Global Business Environment”*. Bucharest, Romania, 16 September 2008. Bucharest: SRAC.
- Olaru, M. and Herlemann, H., 2008, Improvement of competitiveness of international companies in a multicultural environment. *Amfiteatru Economic*, X(Special issue 2), pp. 48-53.
- Olaru, M. et al., 2008, Increase in the competitiveness of SMEs in Romania by implementing a model of evaluation and improvement of their performances in accordance with the European quality management model. *Scientific Research in the Bucharest Academy of Economic Studies. Results obtained from IDEI and Human Resources Projects*. Bucharest: ASE.
- Olaru, M., Pitic, D. and Dodre, C., 2009. Social responsibility of Romanian SMEs within the context of financial crisis and sustainable development. *Quality – Access to Success Journal*, 10(11), pp. 3-10.
- Olaru, M. et al., 2010a. Responsible Commercial Activity Of SMEs And Specific Values Of Sustainable Development In Terms Of The European Excellence Model. *Amfiteatru Economic*, XI(27), pp. 10-26.
- Olaru, M. et al., 2010b. Increasing the competitiveness of SMEs in Romania by implementing a model of evaluation and improvement of their performances in accordance with the European model of quality management. *Final research report*. [online] Available at: <[www.idei856.ase.ro](http://www.idei856.ase.ro)> [Accessed 1 September 2011].
- Paraschiv, D. et. al., 2010, Model for the evaluation and improvement of the eco-innovation capacity of Romanian SMEs with a view to ensure their sustainable development, in accordance with the EU requirements – ECOINNRO, *Research report*.
- Piskar, F., 2009, The Impact of the Quality Management System ISO 9000 on Customer Satisfaction on Slovenian Companies. [online] Available at: <[www.fm-kp.si/zalozba/ISSN/1581-6311/5\\_045-061.pdf](http://www.fm-kp.si/zalozba/ISSN/1581-6311/5_045-061.pdf)> [Accessed 9 June 2011].

- Stoleriu, G. and Olaru, M., 2007. Considerations regarding the relationship management with client in case of SMEs from Romania. *Quality – Access to Success Journal*, Special issue, 8(9), pp.328-333.
- Stoleriu, G., 2009. *The aspects regarding the quality management systems in the SMEs from Romania*. Bucharest: OSCAR PRINT.
- Stoleriu, G., Olaru, M. and Purcărea, I., 2009. Developing an innovation-oriented organizational culture for Romanian small and medium enterprises. In: MTC, *The 6<sup>th</sup> International Conference on Management of Technological Changes*. Alexandroupolis, Greece, 3-5 September 2009. S.I.: Democritus University of Thrace, Greece.
- Suditu, C., Olaru, M., Langă, C. and Tuclea, F., 2009. Impact assessment of the integrated quality - environmental - occupational health and safety management system on customers satisfaction in metallurgical industry in Romania. In: MTC, *The 6<sup>th</sup> International Conference on Management of Technological Changes*. Alexandroupolis, Greece, 3-5 September 2009. S.I.: Democritus University of Thrace, Greece.
- Zineldin, M., 2006. The royalty of loyalty: CRM quality and retention. *Journal of Consumer Marketing*, 23(7), pp. 430-437.